UNITED STATES PATENT AND TRADEMARK OFFICE

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10/747,949	12/31/2003	Seok Hwa Jeong	0465-1116P	6947

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EXAMINER
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ART UNIT	PAPER NUMBER
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NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _06 March 2009_.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-3,7-12,14-22,26-39 and 44-46_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) _1-3,7-12,14-22,26-39 and 44-46_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All   b)☐ Some * c)☐ None of:
      1.☒ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This Office Action is responsive to the Request for Continued Examination (RCE) filed March 6, 2009. Claims 1, 10, 19, 21, 29, 35, 36, and 46 are amended. Claims 4-6, 13, 23-25, 40-43, and 47-49 are cancelled. Claims 1, 21, and 46 are independent. Claims 1-3, 7-12, 14-22, 26-39, and 44-46 remain pending.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 14, 15, 19-21, 32, 33, and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung-yi, United States Patent Application Publication number 2003/0191960 and Given, United States Patent number 6,282,655.

Regarding claim 1, Hung-yi substantially teaches a method of providing an advance screen saver warning for a display apparatus, the method comprising:

predetermining a screen saver standby time and an advance screen saver warning time (see paragraph [0010]; "*within five minutes before the time of using the computer running out, said main program thereof will send out a warning signal and sound to remind the user of the time-limit. Or, there may be less than five minutes left for using the computer when the user first enters the computer. In either case, when the*

pre-set using time is up, said main program thereof will automatically start said screen

saver");

counting a current system idle time during which no system input activity is

detected (Given, addressed below);

activating an advance screen saver warning before activating a screen saver if

the current system idle time is greater than or equal to a time difference between the

screen saver standby time and the advance screen saver warning time (Given,

addressed below); and

continuously displaying the activated advance screen saver warning by the

display apparatus until system activity by a user of the system is detected (Given,

addressed below);

deactivating the advance screen saver warning so that it is no longer displayed,

wherein the screen saver is activated only if the advance screen saver warning time is

completed (see Hung-yi paragraph [0010]; *"within five minutes before the time of using*

the computer running out, said main program thereof will send out a warning signal and

sound to remind the user of the time-limit. Or, there may be less than five minutes left

for using the computer when the user first enters the computer. In either case, when the

pre-set using time is up, said main program thereof will automatically start said screen

saver to keep the computer locked in wait"); and

controlling, during the continuous execution of the advance screen saver

warning, the display apparatus to output at least one of a specified sound and a visual

warning message window indicative of a time difference between the screen saver

standby time and current system idle time (see Hung-yi paragraph [0010]; "*within five minutes before the time of using the computer running out, said main program thereof will send out a warning signal and sound to remind the user of the time-limit. Or, there may be less than five minutes left for using the computer when the user first enters the computer. In either case, when the pre-set using time is up, said main program thereof will automatically start said screen saver to keep the computer locked in wait*").

Hung-yi does not disclose counting a current system idle time during which no system input activity is detected. Hung-yi's teaches counting a current system usage time instead of a current system idle time. Given teaches counting a current system idle time during which no system input activity is detected (see Given column 2 lines 25-42; "*When the user has stopped typing the keystroke sensor 230 will send a logical "false" level to the controller 210 after a predetermined period of time.*"). It would have been obvious to a person of ordinary skill in the art, having the disclosures of Hung-yi and Given laid before him, to keep count of system idle time (as disclosed by Given) instead of system usage time (as disclosed by Hung-yi) for the purpose of warning a user that a screen saver is about to interrupt the display.

Hung-yi does not explicitly teach activating an advance screen saver warning before activating a screen saver if the current system idle time is greater than or equal to a time difference between the screen saver standby time and the advance screen saver warning time, also because Hung-yi only teaches keeping track of system usage time and not system idle time. However, Given also anticipates this limitation (see Given column 3 line 58 through column 4 line 16; "*Another improvement for the ICU*

would include a soft sonic alert when the ICU is either getting ready to issue instructions

to the system box to engage the screen saver, or when enough time has elapsed that

the screen saver activation is near... If the ICU has not detected motion for perhaps 55

(user programmable) seconds (the lowest keyboard inactivity timeout value for a screen

saver in Windows98 is 60 seconds) it could issue a sonic alert. This very act would

cause the quiet reader to look up momentarily, providing just enough motion for the ICU

to reset the keyboard inactivity timer by sending a keystroke to the system box. For

OM2, the sonic alert could serve as a reminder that, in say 5 (user programmable)

seconds, the terminal will be locked up with the password protected screen saver.").

Hung-yi does not explicitly disclose the entire limitation of continuously displaying

the activated advance screen saver warning by the display apparatus until system

activity by a user of the system is detected. Hung-yi discloses continuously displaying

the activated advance screen saver warning by the display apparatus until more time is

added to the IC card. Given discloses issuing a sonic alert to warn that the screen

saver is about to be activated, but resetting the countdown if activity by a user of the

system is detected (see Given column 3 line 58 through column 4 line 16; "*If the ICU*

has not detected motion for perhaps 55 (user programmable) seconds (the lowest

keyboard inactivity timeout value for a screen saver in Windows98 is 60 seconds) it

could issue a sonic alert. This very act would cause the quiet reader to look up

momentarily, providing just enough motion for the ICU to reset the keyboard inactivity

timer by sending a keystroke to the system box."). It would have been obvious to a

person having ordinary skill in the art at the time the invention was made to provide a

continuous visual warning as taught by Hung-yi instead of a sonic warning as taught by

Given as a design choice because Hung-yi and Given are solutions to different

problems, but are considered analogous art.

Regarding claim 2, Hung-yi/Given teaches deactivating the advance screen

saver warning and activating the screen saver if the current system idle time is greater

than or equal to the screen saver standby time (see Hung-yi claim 1; *"sending out*

warning signal and sound to remind the user that the pre-set time-limit is coming to an

end soon; once passing the pre-set using -time, said main program thereof restarting

the screen saver").

Regarding claim 14, Hung-yi/Given teaches that the specified sound is any one

of a computer-generated sound and a human voice indicating a time until the screen

saver is activated (see Hung-yi paragraph [0010]; *"said main program thereof will send*

out a warning signal and sound to remind the user of the time-limit").

Regarding claim 15, Hung-yi/Given teaches that the screen saver standby time

is a total length of system idle time that must elapse before activating the screen saver

(see Given column 3 line 58 through column 4 line 16; *"If the ICU has not detected*

motion for perhaps 55 (user programmable) seconds (the lowest keyboard inactivity

timeout value for a screen saver in Windows98 is 60 seconds) it could issue a sonic

alert.").

Regarding claim 19, Hung-yi/Given teaches that the system input activity

includes at least one of a horizontal synchronization signal, a vertical synchronization

signal, and a manual user input (see Given column 3 line 58 through column 4 line 16;

"If the ICU has not detected motion for perhaps 55 (user programmable) seconds (the

lowest keyboard inactivity timeout value for a screen saver in Windows98 is 60

seconds) it could issue a sonic alert. This very act would cause the quiet reader to look

up momentarily, providing just enough motion for the ICU to reset the keyboard

inactivity timer by sending a keystroke to the system box.").

Regarding claim 20, Hung-yi/Given teaches that the manual user input is made

by a user through a keyboard or mouse (see Given column 3 line 58 through column 4

line 16; *"If the ICU has not detected motion for perhaps 55 (user programmable)*

seconds (the lowest keyboard inactivity timeout value for a screen saver in Windows98

is 60 seconds) it could issue a sonic alert.").

Claims 21, 32, 33, and 35-37 recite a display apparatus having substantially the

same limitations as the method of claims 1, 14, 15, 19, and 20. Therefore, the claims

are rejected under the same rationale.

Claims 3, 16-18, 22, and 34 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Hung-yi (2003/0191960) *supra*, Given (6,282,655) *supra*, and

Flannery, United States Patent 6,286,106.

Regarding claim 3, Hung-yi/Given teaches every limitation of claim 3, but does

not explicitly teach that the deactivating the advance screen saver warning and the

activating the screen saver are performed simultaneously. Flannery teaches a

computer power down notification that simultaneously deactivates the advance power

down warning and activates the power down (see Flannery column 3, paragraph 3;

"dialog box 28 includes countdown-to-shut down timer display 30, which indicates to the user the amount of time that remains until the program will begin an emergency shut down sequence to protect the computer from damage. This amount of time is continually updated until the timer times out"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the computer power down notification of Flannery in the computer lock system of Hung-yi/Given in order to notify users of the time remaining before the screen saver will lock the computer.

Regarding claim 16, Hung-yi/Given/Flannery teaches that the advance screen saver warning time is a length of time during which the advance screen saver warning is continuously activated before activating the screen saver (see Flannery column 3, paragraph 3; *"dialog box 28 includes countdown-to-shut down timer display 30, which indicates to the user the amount of time that remains until the program will begin an emergency shut down sequence to protect the computer from damage. This amount of time is continually updated until the timer times out"*).

Regarding claim 17, Hung-yi/Given/Flannery teaches that the screen saver standby time is predetermined to an automatically assigned default value or a manually selected value (see Flannery column 3, paragraph 3; *"dialog box 28 includes countdown-to-shut down timer display 30, which indicates to the user the amount of time that remains until the program will begin an emergency shut down sequence to protect the computer from damage. This amount of time is continually updated until the timer times out"*).

Regarding claim 18, Hung-yi/Given/Flannery teaches that the screen saver warning time is predetermined to an automatically assigned default value or a manually selected value (see Flannery column 3, paragraph 3; *"dialog box 28 includes countdown-to-shut down timer display 30, which indicates to the user the amount of time that remains until the program will begin an emergency shut down sequence to protect the computer from damage. This amount of time is continually updated until the timer times out"*).

Claims 22 and 34 recite a display apparatus having substantially the same limitations as the method of claims 3 and 16, respectively. Therefore, the claims are rejected under the same rationale.

Claims 7-12, 26-31, 38, 39, 44-46, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung-yi (2003/0191960) *supra*, Given (6,282,655) *supra*, and Pollack, United States Patent 5,153,580.

Regarding claim 7, Hung-yi/Given teaches every limitation of claim 7 except that there is a visual warning message window that includes at least one of a textual representation and a graphical representation indicating the remaining time. Pollack teaches displaying a visual warning message window on a television to warn viewers that the television is about to power down due to inactivity (see Pollack Figures 5 and 6 and column 6 line 63 through column 7 line 20; *"FIG. 6 illustrates a screen display in which the bar graph of FIG. 5 has been replaced with a " time remaining" display 630"*). It would have been obvious to one of ordinary skill in the art at the time the invention

was made to provide a graphical indication of the remaining time as taught by Pollack

with the invention of Hung-yi/Given in order to provide users with a visual warning of a

disruptive event such as the screen saver coming on.

Regarding claim 8, Hung-yi/Given/Pollack teaches that the graphical

representation included in the warning message window is any one of a bar-type graph,

a clock-type graph with a moving indicator, and a pie-type graph (see Pollack Figure 5

and column 6 line 63 through column 7 line 20; "*In FIG. 5, a bar graph 520 is displayed*

along with the video on a screen 510 of a television receiver 500. The bar may be

indicative of time remaining until turn off").

Regarding claim 9, Hung-yi/Given/Pollack teaches that the visual warning

message window is displayed on a predetermined screen portion of the display screen,

which is automatically determined by default or is manually determined by an operator

(see Pollack Figures 5 and 6 and column 6 line 63 through column 7 line 20; "*FIG. 6*

illustrates a screen display in which the bar graph of FIG. 5 has been replaced with a "

time remaining" display 630", the location of the visual warning message window is

inherently predetermined).

Regarding claim 10, Hung-yi/Given/Pollack teaches undisplaying the visual

warning message window from the display screen if any system input activity is

detected (see Pollack column 3 lines 55-63; "*If modulated IR signals are detected*

during the 30 minute interval, then TIMER 114 is reset, and begins timing a new 30

minute interval").

Regarding claim 11, Hung-yi/Given/Pollack teaches undisplaying the visual warning message window and activating the screen saver if the current system idle time is greater than or equal to the screen saver standby time (see Pollack column 3 lines 55-63; "*Assuming that the timer is enabled, if no modulated IR signals are detected during the 30 minute sleep time interval, the receiver is turned off*", when the receiver is turned off, the visual warning message window will inherently be undisplayed).

Regarding claim 12, Hung-yi/Given teaches that the visual warning message window is an on-screen-display (OSD) window (see Pollack claim 2; "*an indication to a user that automatic removal of operating power from said consumer electronics unit is enabled is an on-screen display means for generating a visual display when said timer means is timing said predetermined time interval*").

Claims 26-31 recite a display apparatus having substantially the same limitations as the method of claims 7-12, respectively. Therefore, the claims are rejected under the same rationale.

Regarding claim 38, Hung-yi/Given/Pollack teaches a memory coupled to the controller for storing the predetermined screen saver standby time and advance screen saver warning time (see Pollack column 2 line 53 through column 3 line 9; "*Microcomputer 110 includes program memory (ROM) 112, and stores channel-related data in a random-access memory (RAM) 120. RAM 120 may be either internal to, or external to, microprocessor 110, and may be of either the volatile or non-volatile type. The term "RAM" is also intended to include electrically-erasable programmable read only memory (EEPROM). One skilled in the art will recognize that if volatile memory is*

utilized, that it may be desirable to use a suitable form of standby power to preserve its

contents when the receiver is turned off").

Regarding claim 39, Hung-yi/Given/Pollack teaches that the memory is an

Electrically Erasable Programmable Read-only Memory (EEPROM) (see Pollack

column 2 line 53 through column 3 line 9; *"The term "RAM" is also intended to include*

electrically-erasable programmable read only memory (EEPROM)").

Regarding claim 44, Hung-yi/Given/Pollack teaches that the predetermined

screen saver standby time and advance screen saver warning time are manually set by

a user of the display apparatus (see Pollack column 1 lines 16-25; *"Many modern*

television receivers include a so-called sleep timer function for automatically turning the

receiver off after a predetermined time interval set by a user").

Claim 45 recites a display apparatus with substantially the same limitations as

the method of claim 44. Therefore, claim 45 is rejected under the same rationale.

Claim 46 recites a method having substantially the same limitations as the

method of claim 11. Therefore, claim 46 is rejected under the same rationale.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are

moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Alvesteffer whose telephone number is (571)270-1295. The examiner can normally be reached on Monday-Friday 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Bashore can be reached on (571)272-4088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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